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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/909,175

07/19/2001

Kunal N. Taravade

1003-0603

9068

7590

11/08/2004

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EXAMINER

WOOD, KEVIN S

ART UNIT

PAPER NUMBER

2874

DATE MAILED: 11/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/909,175

Applicant(s)

TARAVADE, KUNAL N.

Examiner

Kevin S Wood

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-21 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-11 is/are rejected.
- 7) ☒ Claim(s) 6 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response

1. This action is responsive the Amendment filed on 21 March 3003. None of the claims were amended and no new claims were added. Claims 1-21 are pending in the application. The Application file was lost and unavailable to the examiner, therefore this response has been delayed until now. The examiner apologizes for any inconvenience that this may have caused.

Response to Arguments

2. Applicant's arguments filed on 21 March 2003 have been fully considered but they are not persuasive. The examiner has thoroughly reviewed the applicant's arguments, along with the specification and the cited references. The examiner firmly believes the cited references to reasonably and properly meet all the claimed limitations.

The applicant's primary argument was that U.S. Patent No. 5,900,983 to Ford et al. does not disclose or suggest all the limitations of the claims 1-5 and 7-11. Specifically, the applicant argues that the Ford reference does not disclose the device substantially prevents a light signal from being transmitted based on the intensity level of the light signal. The applicant argues that the device in the Ford reference is a level-setting optical attenuation, where the level of attenuation may be increased or decreased to maintain a constant average signal power. The examiner agrees that the main purpose of the device within the Ford reference is to maintain a level power

output. However, the applicant seems to be arguing a unusually narrow definition for the terms "substantially prevents" which has not been disclosed within the specification of the application. The Ford reference does not disclose the preventing of all light from being transmitted when the intensity threshold has been exceeded. However the Ford reference discloses substantially preventing the transmission of light when an input signal is significantly higher than the desired output level.

When interpreting the Ford reference, the applicant seems to only consider the situation where the input signal power is slightly higher than the desired output level. In that situation, the Ford device does not appear to substantially prevent the transmission of the light signal when the threshold is exceeded. However, the purpose of the Ford device is to prevent damage to prevent the problems caused when the maximum input levels for network components are exceeded. Therefore it would be clear to any person having ordinary skill in the art, that the Ford device would be capable of limiting signals that are substantially greater than the limits of the network devices, otherwise the devices will remain vulnerable to power irregularities. In a situation where an input signal has an intensity substantially greater than the desired output level, the Ford device substantially prevents the light from being transmitted through the device. It is clear to the examiner that in situations where the input signal power is significantly greater than the desired output level, the Ford device meets the limitation of substantially preventing the transmission of the light signal, since only a small fraction of the light would be transmitted.

Specification

3. Based on the applicant's amendment of the title, the objection to the specification is withdrawn.

Drawings

4. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-5 and 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,900,983 to Ford et al.

Referring to claim 1, Ford et al. discloses all the limitations claimed method. Ford et al. discloses a method of controlling the transmission of a light signal, comprising: transmitting the light signal through an optical fiber (20); and receiving the light signal with a light receiving unit (50a), where the light receiving unit refracts the light signal so that the light signal is substantially prevented from being transmitted through the light receiving unit if an intensity level of the light signal is greater than a

predetermined intensity threshold. See Fig. 2A and Fig. 3B, along with their respective portions of the specification.

Referring to claim 2, Ford et al. discloses all the limitations of the claimed method. Ford et al. discloses that the device is to be used within an optical communications network. It is inherent that within an optical communications network that an electro-optical devices are used to generate the transmitted optical signals.

Referring to claim 3, Ford et al. discloses all the limitations of the claimed method. Ford et al. discloses that the output optical signal could be output by an optical fiber (32).

Referring to claim 4, Ford et al. discloses all the limitations of the claimed method. Ford et al. discloses that the device is to be used within an optical communications network. It is inherent that within an optical communications network that an electro-optical devices are used to receive the transmitted optical signals.

Referring to claim 5, Ford et al. discloses all the limitations of the claimed method. Ford et al. discloses that raising the intensity level of the light signal so that the intensity level is greater than the intensity threshold level causes the index of refraction of the core or cladding to change so that light diverges and is not transmitted. See Fig. 3B.

Referring to claim 7, Ford et al. discloses all the limitations of the claimed method. Ford et al. discloses that the light signal is transmitted through the device when the intensity of the light signal is less than the threshold level.

Referring to claim 8, Ford et al. discloses all the limitations claimed invention. Ford et al. discloses an arrangement for controlling the transmission of a light signal, comprising: a first optical fiber (20) for transmitting the light signal; and a light receiving unit (50a) for receiving the light signal from the first optical fiber, where the light receiving unit refracts the light signal so that the light signal is substantially prevented from being transmitted through the light receiving unit if an intensity level of the light signal is greater than a predetermined intensity threshold. See Fig. 2A and Fig. 3B, and their respective portions of the specification.

Referring to claim 9, Ford et al. discloses all the limitations of the claimed invention. Ford et al. discloses that the device is to be used within an optical communications network. It is inherent that within an optical communications network that an electro-optical devices are used to generate the transmitted optical signals.

Referring to claim 10, Ford et al. discloses all the limitations of the claimed invention. Ford et al. discloses that the output optical signal could be output by an optical fiber (32).

Referring to claim 11, Ford et al. discloses all the limitations of the claimed invention. Ford et al. discloses that the device is to be used within an optical communications network. It is inherent that within an optical communications network that an electro-optical devices are used to receive the transmitted optical signals.

Allowable Subject Matter

7. Claims 13-21 are allowed.

8. Claims 6 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter:

Referring to claim 6, the prior art does not disclose all the limitations of the claimed invention. The prior art does not disclose the refracting of the light signal at the interface if the index of refraction of the first optical material does not match the nonlinear index of refraction of the second optical material.

Referring to claim 12, the prior art does not disclose all the limitations of the claimed invention. The prior art does not disclose that the light signal is refracted at an interface if the index of refraction of the first optical material does not match the nonlinear index of refraction of the second optical material.

Referring to claims 13-20, the prior art does not disclose all the limitations of the claimed invention. The prior art does not disclose that the light signal is refracted at the interface such that the light signal is substantially prevented from being transmitted through the light receiving unit if the index of refraction of the first optical material does not match the nonlinear index of refraction of the second optical material.

Referring to claims 21, the prior art does not disclose all the limitations of the claimed invention. The prior art does not disclose that the light signal is refracted at the interface such that the light signal is substantially prevented from being transmitted

through the light receiving unit if the index of refraction of the first optical material does not match the nonlinear index of refraction of the second optical material.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin S Wood whose telephone number is (571) 272-2364. The examiner can normally be reached on Monday-Thursday (7am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney B Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2874

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KSW



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